

supposed a contemporary portrait of Mary Queen of Scots. It belongs to R.B. Aldersey, Esq., of Chigwell-road, Essex, and its descent is traced for a century and a half.

W. R. Hamilton, Esq., V.P., exhibited, from W. Roots, Esq., two relics drawn from the bed of the Tamar just above Kingston, one of them being a spear-head.

Dawson Turner, Esq., F.S.A., communicated five drawings, the subjects of which are as follows:—

1. An urn found at Burgh Castle, the Gariocennium of the Romans; it was exhumed on the 29th December last, in the same field, called the Brick-kiln Field, on the eastern side of the castle walls, as were three figured by Ives, p. 35, and was partly filled with bones, which were accompanied by four iron nails.

2. A Pax, from the same village, carved in front with the Holy Rood, the Blessed Mary, and St. John.

3. A Roman sacrificial instrument, or præfectorium of brass, found at Hertingley, in July, 1842; it is inscribed QUARTANA 2. Its length is 10½ inches, and its diameter 6 inches.

4. A gun, of wrought iron, of the time of Henry VII. or VIII., found in the sea near Lowestoft, and now in the possession of Geo. Edwards, Esq. Others have been found near the same spot, and probably from the wreck of the same vessel. Its total length is 9 feet.

5. A wooden shield, 24 inches long, and three-quarters of an inch thick, found in the wall of a house at Yarmouth. It is carved with the quarterings of the Prince of Orange, and painted in colours.

Richard Almack, Esq., F.S.A., of Melford, communicated a letter written by Sir Thomas Stanhope, of Shelford, county of North, to Lord Burghley, in 1582, relative to the funeral of his mother, Lady Stanhope, the widow of Sir Michael Stanhope, one of those who suffered with the Duke of Somerset, in the reign of Edward the Sixth. The lady was lying dead at Nottingham. Mr. Almack supposed this document to be indorsed by Lord Burghley himself; but the indorsement is in the writing of one of his secretaries.

Edward Halliwell, Esq., communicated transcripts from the registry of trials before Major-Gen. Lambert and the Council of War sitting in Yorkshire in the year 1647.

May 23.—W. R. Hamilton, Esq., V.P., is the chair.

Walter Hawkins, Esq., exhibited an ancient sword found in the bed of the river Thames, in 1739, at the building of Westminster Bridge. It resembles the large swords of state of the thirteenth and fourteenth centuries. The silver furniture of the sheath (itself decayed), adheres to it by the rust, and is impressed in several places with the motto, *Difficiliter et a stygæ beatæ*. It is probable the sword itself was a century at least older than the sheath. Its length is 5 feet 6½ inches. It has been welded, and it may be presumed has lost something by the welding.

The Rev. J. B. Reade, of Stone, near Aylesbury, exhibited an impression, in tin, of a Norman font recently placed in his church (to which it is suitable in style), after having been long since removed from its original site, the church of Hampton Norris, in Berkshire. It has been for some years in a garden of a southern suburb of London, and was presented to Mr. Reade by J. Y. Ashman, Esq., F.S.A. Mr. Reade noticed a statement in "Dr. Lipscomb's History of Buckinghamshire," which asserts that Stone Church was erected on an artificial mound, whereas it has been ascertained to be a natural sand-hill.

The Rev. John Webb, F.S.A., communicated a memoir upon a succession of Templars (and afterwards of Hospitallers), at Gurney, in Herefordshire, which is rather described nor enumerated, even in the new edition of the Monasticon, but of which he has collected many very interesting notices, both historical and architectural. Their church (of Norman architecture) remains, and extensive indications of the site of their manor, together with a remarkable door-case, which is still perfect. It is built of stone, the wall of rubble rough-cast without and lined with ashlar within, of circular form, measuring 17 feet 3 inches in diameter, and 16 feet in height. There are twenty tiers or compartments for the birds, forming altogether 666 holes. From the following inscription over

the door, it is shown to have been erected in the year 1326.

+
A^o dⁿⁱ m^{ccc}
xxvi fact' fait f^o c^o
lunarium per fratrem
Ricardum.

The two last lines being somewhat obscure, from the wear of centuries. On the interior face of the building occurs in one place the name

oiles

stys

and on other stone are carved the double cross of the Templars, accompanied in one instance with the letter R, of the scriptorial form.

THOROUGH DRAINING.

Mr. J. H. Charnock, secretary to the "Yorkshire Land-draining Association," has lately published a pamphlet on the important subject of Thorough Draining,—a paper read before the Wakefield Farmers' Club. It was truly said by Lord Spencer, a short time ago, that farming was yet in its infancy; and many circumstances present themselves to the attention which amply verify the assertion. Through the operation of the several agricultural associations which have been established throughout the country, much valuable information upon this important matter has been extensively diffused. Much good has been already produced, and much more will inevitably follow, so long as scientific men turn their attention to all the various matters which are comprehended in the subject. Amongst these, thorough draining has been considered one of the most important. Mr. Charnock has ranged himself in the ranks of those who have devoted their attention to supply the most efficient means for the attainment of the most beneficial ends. His attention, and skill, and devotion to the subject, will, we trust, meet with their due appreciation, and his suggestions engage the attention of all who are not only labouring in the same field as originators of improvements, but anxious to carry into practical operation the plans which are based on experience and a due cognition of all needful means, modes, and appliances. We should deem it wrong to transcribe an undue portion of this useful publication; but we confidently recommend it to the cultivator of the soil, with the assurance that it is fully entitled to their attentive perusal, merely summarizing the following general observations:—

"In the first place, then, if there is one operation more than another in which the maxim 'that what is worth doing is worth doing well' holds good, it is in draining; effective and permanent must be your work, or it comparatively money and labour thrown away. And for this reason, if for no other, should it be done under the superintendence of the landlord; it is in truth an owner's work; it is principal invested, and cannot, except by an occupier, be with justice treated as a mere outlay for repair. It is a permanent improvement of the fee, and if permanently and judiciously done, gives as surely a rental fully commensurate with the outlay. At the same time; however, rather than farm undrained land, it is the palpable interest of the occupier himself to undertake the work, and especially if he previously concludes for any certainty of tenure. But the most desirable arrangement is, that owner and occupier should act mutually in the matter, and as the best interests of each are so intimately bound together, they should mutually concur in the execution of the work. And here I may mention the plan which is adopted on the Greenwich Hospital estates in Northumberland, under the superintendence and by the advice of that eminent agriculturist Mr. Grey, of Dilston, which I think may be considered as perfectly equitable and unexceptionable in all cases. The rule is this,—if the drainage is done during the first seven years of the lease, the hospital pays one-third of the entire cost; if during the second seven years, one-half the cost; and if in the last seven years of the term, it pays two-thirds of the cost of draining, the lease being for twenty-one years.

"In the second place, prior to commencing operations, great care should be taken accu-

rely to ascertain the character of the subsoil—its porosity or tenacity—thereby to regulate, as far as practicable, both the distance and depth of the drains. That of the former should in no case, where drainage is necessary at all, exceed ten yards; and where the substratum is tenacious, it will often require not to be more than half that distance in order to be thoroughly effective, without which, I repeat, it is comparatively lost labour. With regard to the latter, if circumstances permitted, I would ever (as a general rule) have drains shallower than two feet, but I should prefer thirty inches or three feet, in order to admit, without apprehension, of the subsoil plough following; and so as to be out of the way of all damage, under any circumstances.

"Thirdly, I would have the drains cut with a little more slope at the side than is usually practiced, affording thereby the operator more room for laying the tile and clearing the bottom, both which are very essential, but in a deep drain cut perpendicularly, somewhat difficult without injury being done. And besides, I conceive it affords a more regular penetration into the drain, with less liability to the washing in of the sides, or any portion of them; and also, because the edge is thus rendered much safer and firmer for the tread of a horse.

"Fourthly, I would in all cases use some porous substance, other than the earth from the cutting of the drain, as covering over the tile; such as broken stone, where the locality afforded it, or burnt clay, or engine ash (the best of all) if obtainable; and in the absence of all such materials, leaf-mould, or lime, or sand, and durable) and thorns, or brushwood, properly cut and put in; but in no case, the soil from the drain alone immediately over the tile.

"Fifthly, it is desirable the drains should be cut as near the exact width of the tile at the bottom as practicable, otherwise, in filling up, the tile is almost sure to get displaced, and thus create an interruption. Much greater pains than are usually bestowed should be given to the general manipulation of the work, particularly in laying the tile firm and clean; which would be readily acquired by the men, without any diminution of their allotted task, were the superintendence persons of skill and judgment.

"And lastly, I must ever hold the opinion, that in all cases of ordinary levels of surface, the most judicious as well as the cheapest disposition of the drains is down the furrows; that being usually the natural direction of the fall, and because the surface water thereby the more readily reaches the drain, and at the nearest point. Not that I would continue to retain the high ridge and furrow after the land is drained, but in every case would work the lands down to a suitable flatness as soon as practicable without detriment to the sowing, and the crops. There are two other points which I also consider essential; the one is practicable under all circumstances, and must, therefore, not be disregarded; it is, never to permit one drain to enter another (and especially the main receivers) at right angles, but to give them such an inclination in their junction as shall allow the water free course without injury to the recipient drain. The other is, perhaps, a matter of some difficulty, but nevertheless, of great utility—I allude to the drains being so disposed as to admit the air throughout their entire course, in fact beneath the whole surface of each field; the effect upon strong tenacious clay will be to facilitate their operation most materially, and will be obvious to every reflecting mind."—*Doncaster Gazette*.

THE NELSON COLUMN.—The committee lately assembled for the purpose of taking into consideration the completion of the column in a manner due to the memory of the illustrious hero. The additional sum required for the purpose of making lions, bas-reliefs, and steps, is between 10,000*l.* and 12,000*l.* The committee have expended 20,000*l.*, the total amount possible to be raised by public subscription, and are obliged to express a decided opinion, that if the government do not come forward and supply the money for finishing the monument, it must remain in its present condition, and be viewed rather as a reproach upon the metropolis than a credit. They agreed in the propriety of waiting upon Sir Robert Peel, to represent the exact state of the case, and to request the Minister's aid.